

secretory cells,

- (d) polymerizing collagen in said semisolid bead to form a solid, agarose-collagen bead containing secretory cells, and
- (e) coating said solid, agarose-collagen bead containing secretory cells with agarose.

~~2~~ 52. The method of claim ~~51~~<sup>1</sup>, wherein said secretory cells are contained in pancreatic islets.

*cont'd 3*  
~~4~~ 53. The method of claim ~~52~~<sup>2</sup>, wherein said pancreatic islets are human pancreatic islets, bovine pancreatic islets, rat pancreatic islets or porcine pancreatic islets.

~~4~~ 54. The method of claim ~~53~~<sup>3</sup>, wherein said pancreatic islets are human pancreatic islets.

~~5~~ 55. The method of claim ~~51~~<sup>1</sup>, wherein said secretory cells are contained in from about 50,000 to about 700,000 pancreatic islets.

*B* ~~6~~ 56. An agarose coated, solid agarose-collagen bead <sup>containing secretory cells</sup> prepared by the process of claim ~~51~~<sup>1</sup>.

~~6~~ <sup>7</sup> 57. The agarose coated, solid agarose-collagen bead of claim ~~56~~<sup>6</sup>, wherein said secretory cells are contained in pancreatic

23

islets.

<sup>8</sup>  
~~58~~. The agarose coated, solid agarose-collagen bead of claim ~~58~~ wherein said pancreatic islets are human pancreatic islets, bovine pancreatic islets, rat pancreatic islets or porcine pancreatic islets.

<sup>9</sup>  
~~59~~. The agarose coated, solid agarose-collagen bead of claim ~~58~~, wherein said pancreatic islets are human pancreatic islets.

<sup>10</sup>  
~~60~~. The agarose coated, solid agarose collagen bead of claim ~~59~~, comprising from about 50,000 to about 700,000 islets.

<sup>11</sup>  
~~61~~. Method for treating a mammal having a condition caused by impaired secretory cell function, comprising:

transplanting into said <sup>mammal</sup> ~~patient~~ a therapeutically effective amount of the agarose coated, solid agarose-collagen bead of claim

~~58~~.

<sup>12</sup>  
~~62~~. The method of claim ~~61~~, wherein said condition is insulin dependent diabetes.

<sup>13</sup>  
~~63~~. The method of claim <sup>12</sup> ~~62~~, wherein said bead contains cells derived from a pancreatic islet.

24